

IN THE CLAIMS:

Please cancel Claims 3, without prejudice to or disclaimer of the subject matter recited therein. Please amend Claims 1, 4 and 5, as follows:

1. (Currently Amended) A method of manufacturing an optical element comprising at least a plurality of pixels formed on a substrate and partition walls arranged respectively between adjacent pixels, said method comprising the steps of:

forming partition walls of from a resin composition containing carbon black on a substrate;

performing a dry etching process by irradiating the substrate carrying said partition walls formed thereon with plasma in an atmosphere containing a gas selected from the group consisting of oxygen, argon and helium;

performing a plasma treatment process by irradiating the substrate subjected to said dry etching process with plasma in an atmosphere containing at least fluorine atoms such that each partition wall after said plasma treatment process shows a surface having a contact angle relative to pure water of not smaller than 110°; and

forming pixels by applying ink to the areas surrounded by the partition walls by means of an ink-jet system.

2. (Previously Presented) The method of manufacturing an optical element according to claim 1, wherein a surface coarseness of the partition walls is greater after said plasma treatment process than before said dry etching process.

Claim 3 (Cancelled).

4. (Currently Amended) The method of manufacturing an optical element according to claim 1 3, wherein an arithmetic mean deviation (Ra) of a surface of the partition walls after said plasma treatment is between 3nm and 50nm.

5. (Currently Amended) The method of manufacturing an optical element according to claim 1 3, wherein ~~a contact angle of a surface of the partition walls relative to pure water is not smaller than 110° and that of a surface of the substrate shows a surface having a contact angle~~ relative to pure water is of not greater than 20° after said plasma treatment process.

6. (Previously Presented) The method of manufacturing an optical element according to claim 1, wherein a gas introduced in said plasma treatment process is at least a halogen gas selected from the group consisting of CF₄, SF₆, CHF₃, C₂F₆, C₃F₈ and C₅F₈.

7. (Previously Presented) The method of manufacturing an optical element according to claim 1, wherein a gas introduced in said plasma treatment process is at least a mixture of a halogen gas selected from the group consisting of CF₄, SF₆, CHF₃, C₂F₆, C₃F₈ and C₅F₈ and O₂ gas and wherein the amount of O₂ gas in the mixture is not greater than 30%.

8. (Previously Presented) The method of manufacturing an optical element according to claim 1, wherein said ink contains at least a setting ingredient, water and an organic solvent.

9. (Previously Presented) The method of manufacturing an optical element according to claim 1, wherein said method is adapted to manufacture a color filter where said substrate is a transparent substrate and said partition walls are provided by a black matrix.

10. (Cancelled).

11. (Previously Presented) The method of manufacturing an optical element according to claim 1, wherein after said plasma treatment process, the plasma-treated substrate is subjected to a water treatment process.

12. (New) The method of manufacturing an optical element according to claim 8, wherein a gas introduced in said plasma treatment process is at least a mixture of a halogen gas selected from the group consisting of CF₄, SF₆, CHF₃, C₂F₆, C₃F₈ and C₅F₈ and O₂ gas and wherein the amount of O₂ gas in the mixture is not greater than 30%.